

Minimal or non-existent errors

# 4<sup>th</sup> GRADE MAIN RANGEFINDER 4

Your teacher will read the entire test to you before you begin.  
Do not use a calculator on this assessment.

1. The fourth grade class opened a store at school. They had 25 notebooks, 62 erasers, 104 rulers, 19 pens, and 1,204 pencils.

- a. How many total items did the fourth grade class have that they could sell? Show or explain how you found your answer.

25 notebooks  
62 erasers  
104 rulers  
19 pens  
+ 1,204 pencils

There are 1414 items that can be sold in all.

- b. The students need three times as many erasers as the store has on the shelf. How many erasers do the students need? Show or explain how you found your answer.

check ✓ 62 erasers  
62  
+62  
126 in all x 3 (triple)  
They need 186 erasers.

Advanced mathematical vocabulary

- c. A teacher bought 25 rulers from the school store. How many rulers were left? Show or explain how you found your answer.

check ✓ your answer.  
25 bought 09  
+ 79 left  
104 in all - 25 bought

They have 79 left.

Advanced application of basic skills in checking work

- d. Five students came to buy the 25 notebooks. Each of the five students got the same number of notebooks. How many notebooks did each student buy? Show or explain how you found your answer.

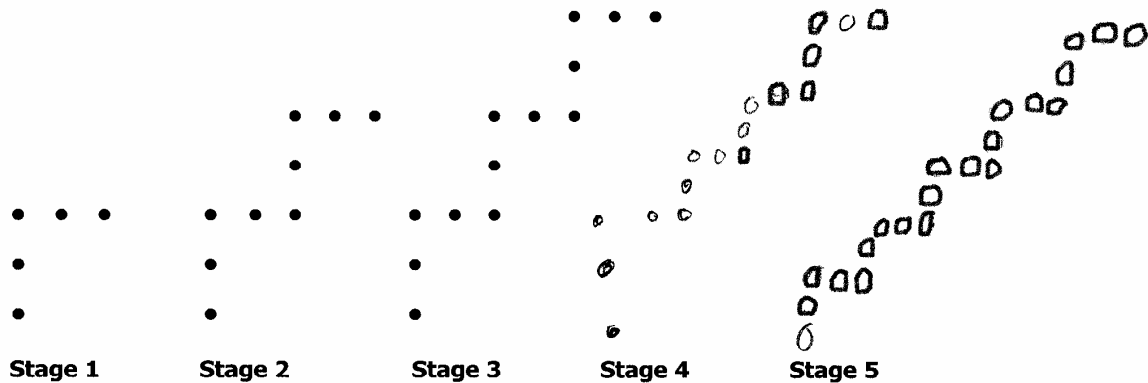
check ✓  
5  
x 5  
25  
5 ) 25

Each student bought 5 notebooks.

Read problems 2, 3, 4, and 5 on this and the next two pages.  
 Select three problems to answer. Answer ALL of the parts of the three problems you select to answer.  
 Cross out the one problem that you do not choose to answer.

2. Look carefully at the stair-step pattern.

a. Draw Stage 4 and Stage 5 of the pattern.



b. Complete the chart below showing the total number of dots in each stage.

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Number of Dots	5	9	13	17	21

c. If this pattern continues, how many dots will be in Stage 10? Show or explain how you found your answer.

21 stage 5

$$\begin{array}{r}
 21 \\
 + 4 \\
 \hline
 41
 \end{array}$$

There will be 41 dots in Stage 10.

Advanced understanding of situation through checking

check

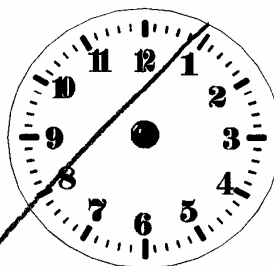
$$\begin{array}{r}
 41 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 + 4 \\
 \hline
 210 + 20 \\
 \hline
 21
 \end{array}$$

d. Explain the rule for the number pattern you see.

I see that every new stage has four more than the stage before it.

3.

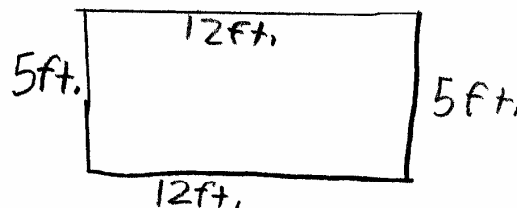
Cinema 6 Movie Theater		
1 <sup>st</sup>	movie begins at	12:15 PM
2 <sup>nd</sup>	movie begins at	12:30 PM
3 <sup>rd</sup>	movie begins at	12:45 PM
4 <sup>th</sup>	movie begins at	1:00 PM
5 <sup>th</sup>	movie begins at	1:15 PM
6 <sup>th</sup>	movie begins at	1:30 PM



- a. How much time is between the start of the first movie and the start of the sixth movie? *Show or explain how you found your answer.*
- b. If the third movie lasts 2 hours and 15 minutes, what time will it be when the movie finishes? *Show or explain how you found your answer.*
- c. A family wants to go to the fifth movie. They live 40 minutes from the theater. What time will they need to leave home to get to the theater on time? *Show or explain how you found your answer.*

4. Mrs. McNeal is going to plant her garden. She wants to make it 12 feet long and 5 feet wide.

- a. **Draw** a picture or a diagram of her garden. **Label** the measurement of each side.



- b. What is the geometric shape of the garden? Explain what makes it that shape.

A rectangle it's that because a rectangle has two long sides and two short sides

- c. What is the perimeter of Mrs. McNeal's garden? *Show or explain how you found your answer.*

$$\begin{array}{r}
 5\text{ft} \\
 \times 2 \\
 \hline
 10
 \end{array}
 \quad
 \begin{array}{r}
 12\text{ft} \\
 \times 2 \\
 \hline
 24
 \end{array}
 \quad
 \begin{array}{r}
 10\text{ft} \\
 + 24\text{ft} \\
 \hline
 34
 \end{array}$$

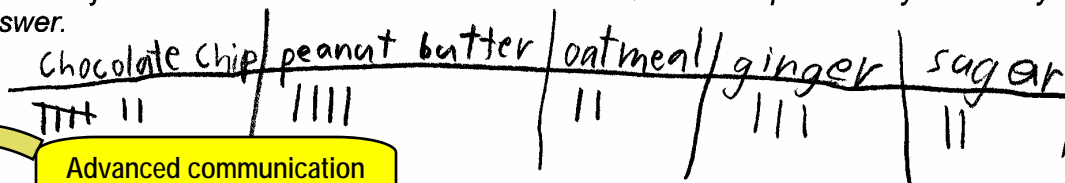
The perimeter is 34 ft.

Effective problem-solving strategy

5. Andre asked his teammates to choose their favorite kind of cookie. Their choices are listed below:

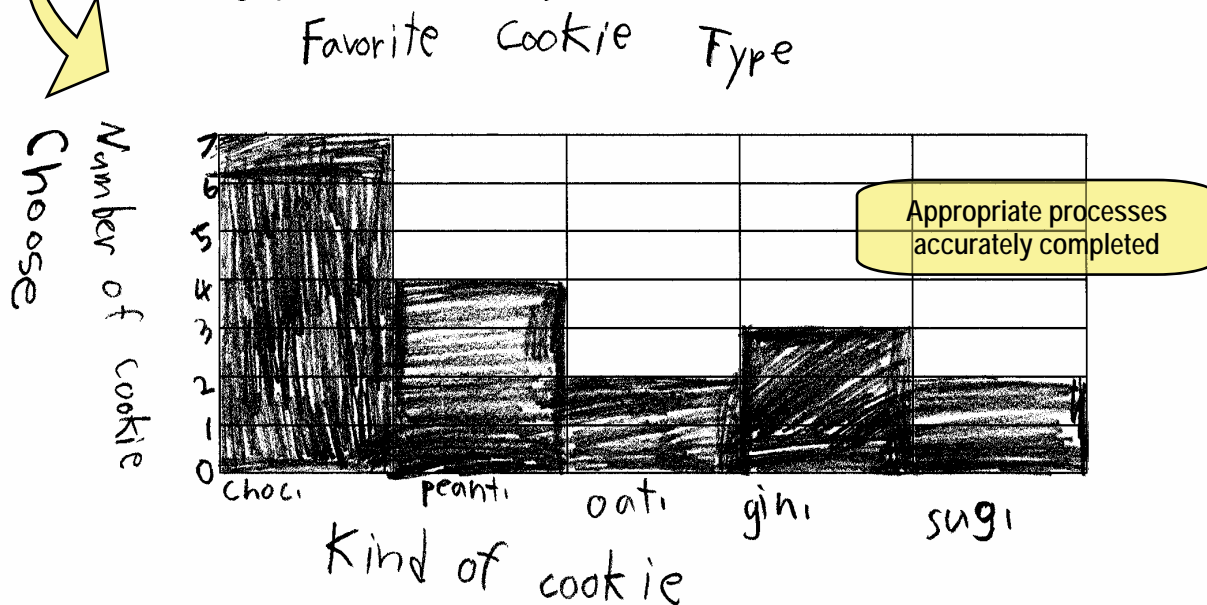
Teammate	Favorite Cookie	Teammate	Favorite Cookie
Pete .....	chocolate chip ✓	Ryan .....	chocolate chip ✓
Cory .....	peanut butter ✓	Danny .....	oatmeal ✓
Bob .....	oatmeal ✓	Chris .....	ginger ✓
Jack .....	chocolate chip ✓	Tom .....	sugar ✓
Josh .....	peanut butter ✓	Bill .....	peanut butter ✓
Steve .....	ginger ✓	Tony .....	chocolate chip ✓
Mike .....	chocolate chip ✓	Kayd. ....	chocolate chip ✓
Matt .....	chocolate chip ✓	Payton .....	peanut butter ✓
Shawn .....	sugar ✓	Sam .....	ginger ✓

- a. How many teammates chose each kind of cookie? Show or explain how you found your answer.



Advanced communication skills

- b. Make a graph to show how many teammates chose each kind of cookie. Label the graph.



- c. Write **two** things you learned about the cookie choices by looking at the graph.

I learned that Chocolate Chip is the most and oatmeal and sugar are the same